TW-4 Deliberate ORM Analysis

COLLEGE STATION – EASTERWOOD FIELD (KCLL)
NIGHT OPERATIONS
TEAM VISIT 14 FEB 08

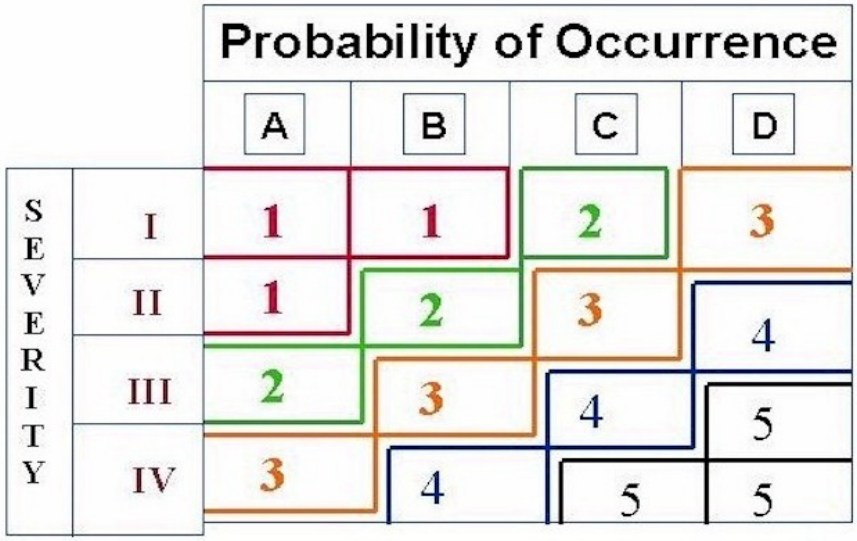
ORM TIGER TEAM

- 8 Feb incident with T-34 departing prepared surface (3rd incident in 18 mos.) Two incidents at KCLL for departing prepared surface.
- Commodore's requests on 11 Feb 08:
  - "ORM FOR ALL TW-4 AIRCRAFT FOR NIGHT OPERATIONS AT KCLL"
  - No night operations at KCLL until ORM analysis complete/all threats identified/mitigated for future operations

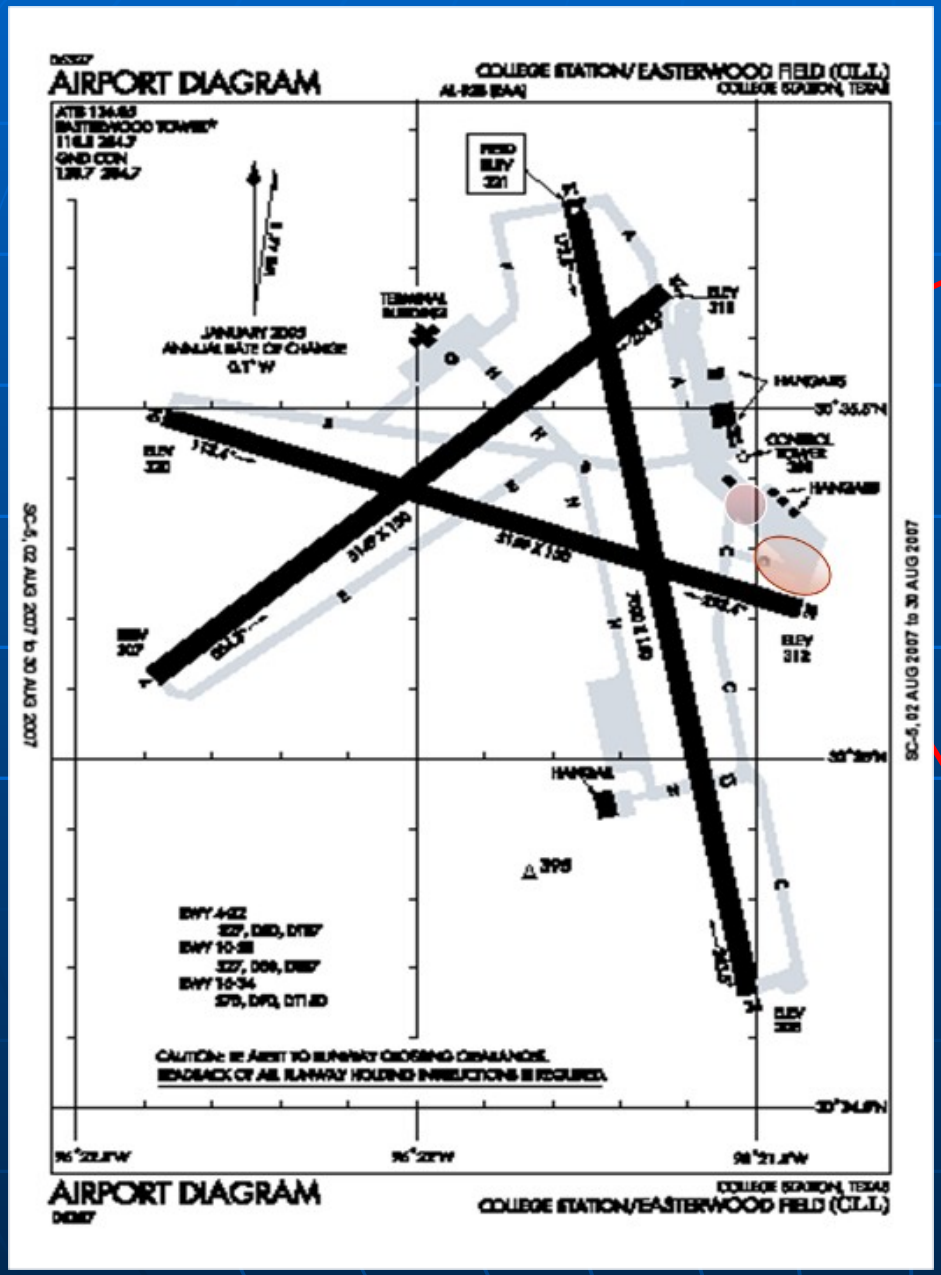
Risk Matrix

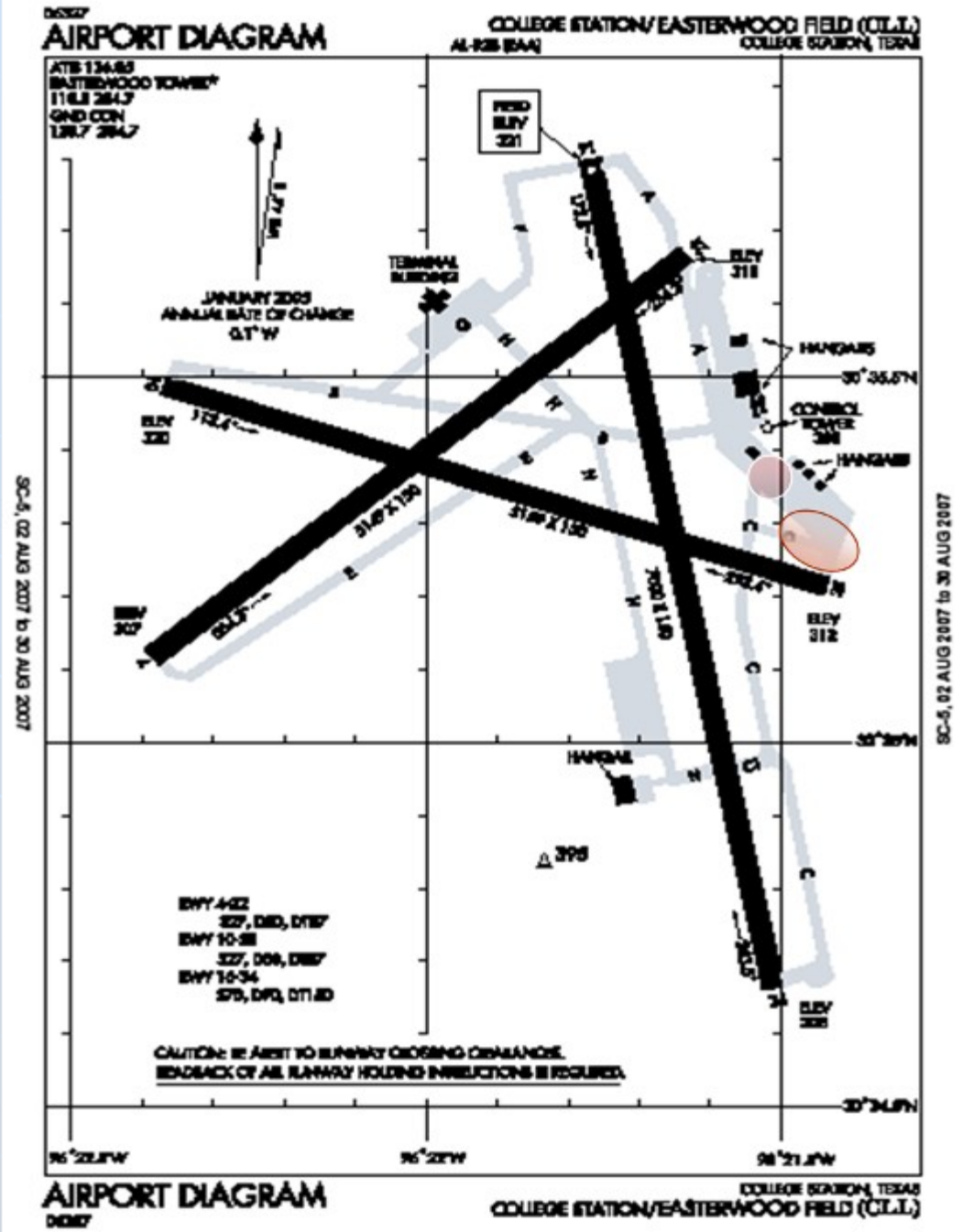
Risk Assessment Code

1 = Critical
2 = Serious
3 = Moderate
4 = Minor
5 = Negligible



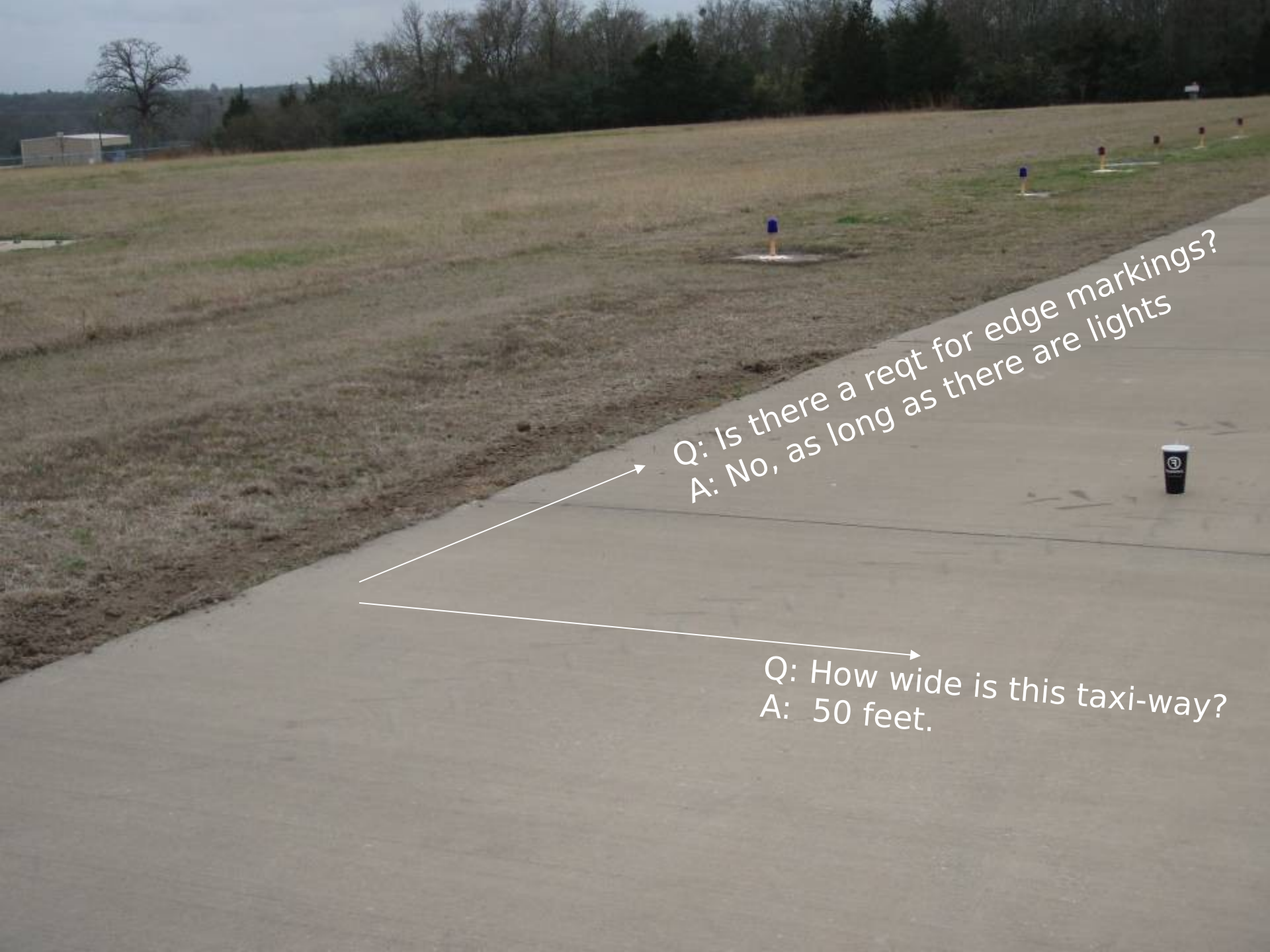
COLLEGE STATION – EASTERWOOD FIELD (KCLL)

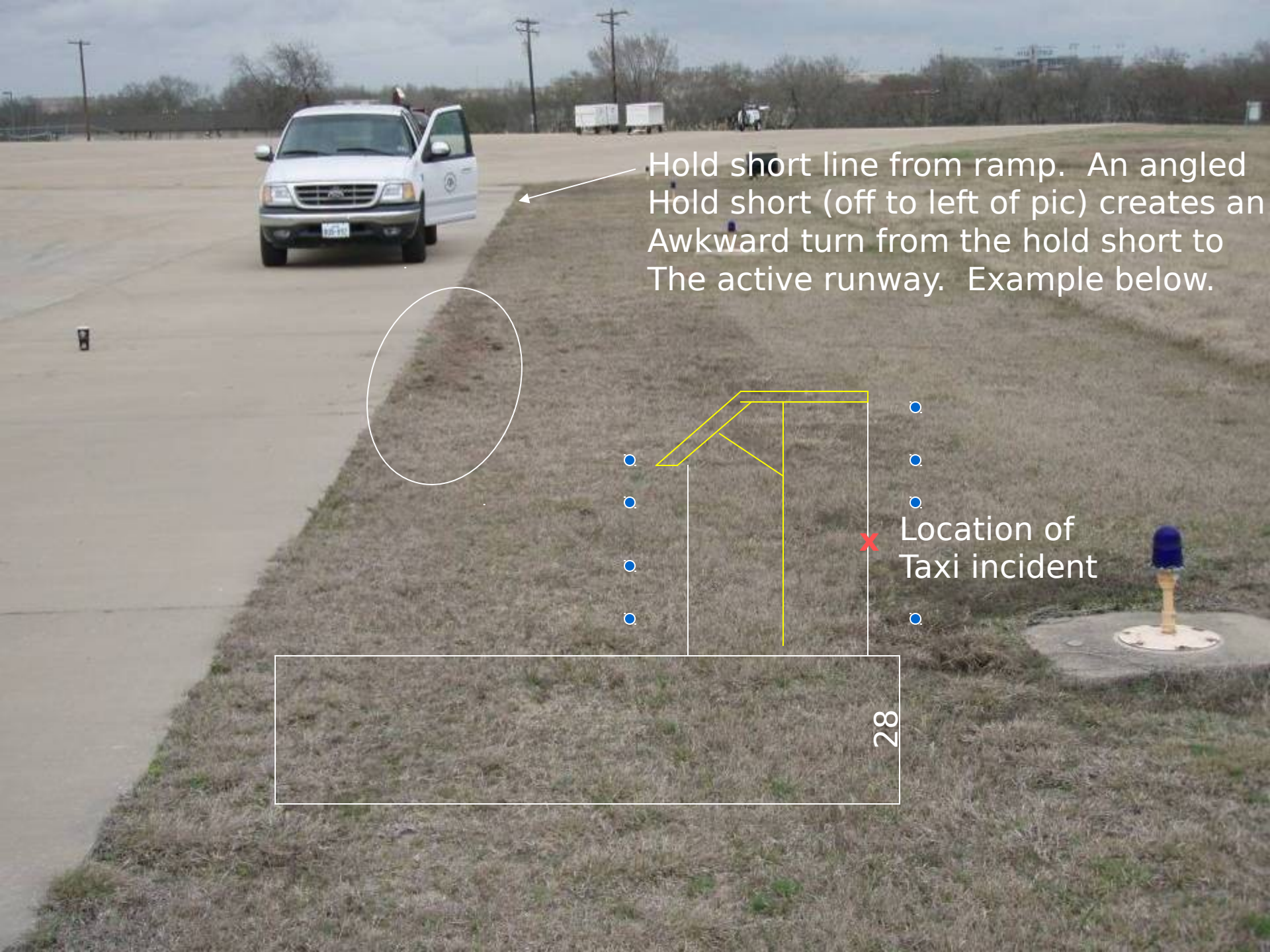


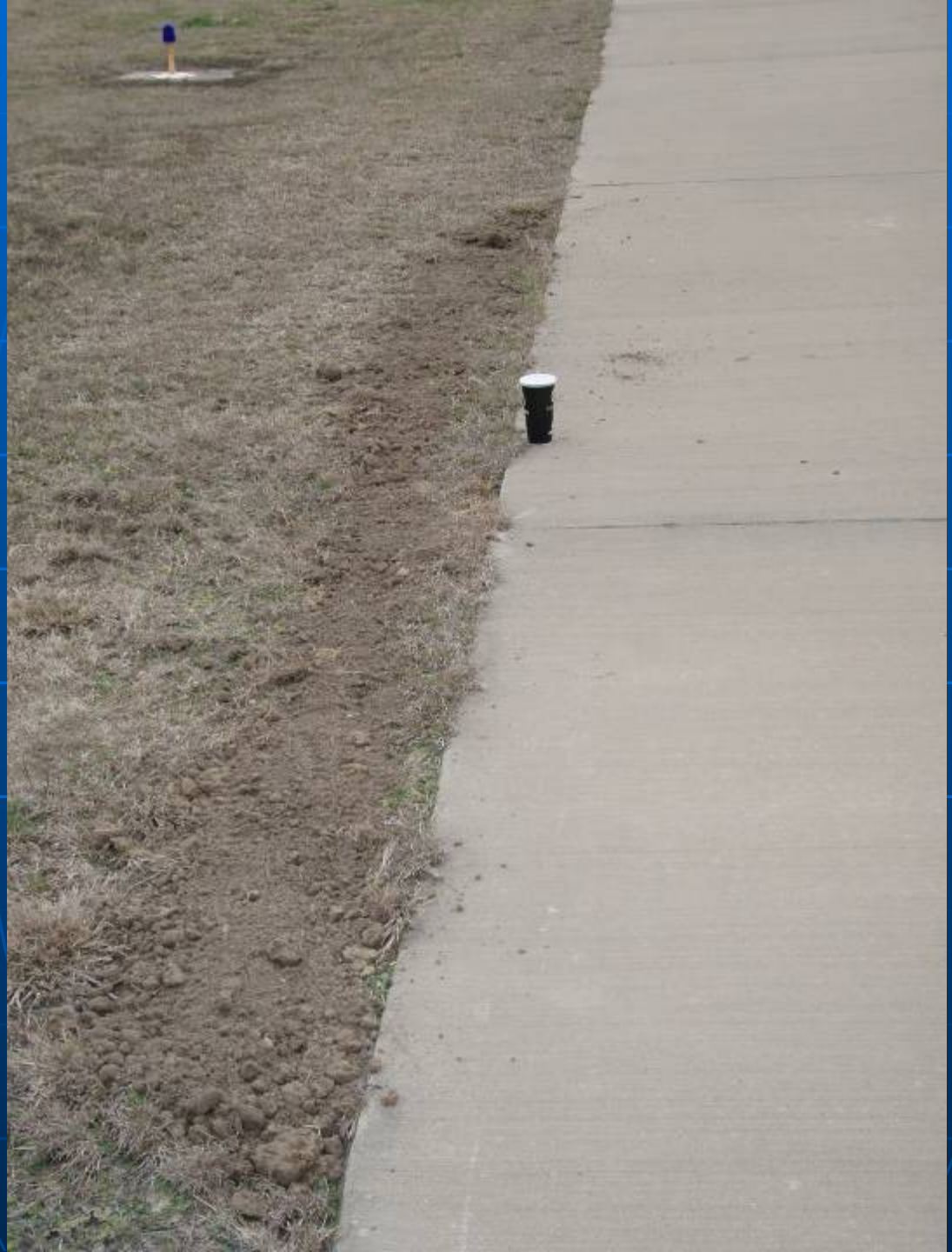


On a night training flight a T34-C departed the paved surface of the taxi way at Easterwood Airport (College Station). The aircraft was crewed by one student and one instructor pilot. The student was at the controls at the time of the incident. The instructor pilot sitting in the aft cockpit, realized that the student was taxiing left of center line when he saw the center line come into his field of view on the right side of the aircraft. The IP announced to the student to come right shortly there after the IP felt the left main mount roll off the concrete and into the grass and mud. The IP then took the controls and stopped the aircraft. This occurred between the hold short and runway 28. The aircraft was shut down using normal procedures and airport personnel towed the aircraft back to the FBO for inspection. There was no damage to the aircraft. On follow on inspection of the area it was found that there is no edge marking where the concrete of the taxi way ends. Additionally the blue taxi way lights are installed at least eight feet from the edge of the concrete.

Centerline of taxi-way
Lights meet maximum distance
Of 10 feet from edge of weight
Bearing surface


Q: Is there a reqt for edge markings?
A: No, as long as there are lights
Q: How wide is this taxi-way?
A: 50 feet.


Hold short line from ramp. An angled
Hold short (off to left of pic) creates an
Awkward turn from the hold short to
The active runway. Example below.
Location of
Taxi incident
28



College Station – Easterwood Field (KCLL)

Probability of Taxi Incident: C (May Occur in Time)
Severity: III (Minor injury/damage)
Overall RAC: **4 (Minor)**
Lighting: Blue taxi lights all the way to ramp (although displaced up to 10 ft from weight bearing paved surface).

Ramp:

a) Very easy access to ramp coming off the taxiway.

b) No obstructions on ramp other than cones, chocks, or other aircraft.

c) Surface is level and surrounded by grass. No taxi lines once taxiway stops at ramp entry.

d) Lighting is limited and is primarily directed to area just forward of the FBO. The further away from the ramp the less lighting available for start-up, etc.

- Identify hazard: TW-4 aircraft departs prepared surface during taxi operations
- Assess hazard: No taxi edge paint, blue taxi-lights well off paved surface (but within Aviation Circular standards), inadequate lighting on ramp; pilot heads-down during taxi ops, bad canopy/windshield/scratches. Poor wiper blades RAC 4 (Minor)
- Make risk decisions: KCLL is a valuable location with good approaches. Field conditions are adequate and painted centerline are clearly visible on all taxiways. Blue taxi lights are in good shape and meet the maximum distance from paved/weight bearing surface of 10 feet.
- Implement controls:
  - Single Engine: Vigilance (heads-down) while taxiing at night (Read board / ORM Field Guide)
    - Front seater – always heads-up during taxi operations
    - Improved CRM Communications (“I’m heads-down”)
    - Utilization of taxi-way lines / emphasis on monitoring deviation
    - Update ORM Field Guide / Post on TW-4 Safety website. Incorporate field briefs to solo/X-country
    - Clarification of briefing items (MCG) on specific airfield operating from / lighting / illumination / taxi operations
  - Multiengine: One pilot heads-up at all times
    - Vigilance (heads-down) while taxiing at night (Read Board / ORM Field Guide)
    - CRM Communication / MCG emphasis during night orientation and taxi operations
    - Utilization of taxi-way lines / emphasis on monitoring deviation
    - Update ORM Field Guide / Post on TW-4 Safety website. Incorporate field briefs to solo/X-country
  - Change briefing guide (blue card) to include night operations/ground operations / ORM/CRM
  - Update ORM Field Guide / Post on TW-4 Safety website. Incorporate field briefs to solo/X-country
  - Identify aircraft with poor canopy / poor vision – Ensure clean / good visibility prior to flight
- Supervise:
  - Safety Officers update Read Board / Ensure sign-off by students/instructors
  - Next Squadron AIM / AOM – brief this specific incident and describe current hazard
  - Recommend to FBO to paint taxi edge markings on all taxi-ways (yellow double marker)
  - Follow up on FBO’s plan to install total ramp lighting within 6-8 months.
- Board Recommendation: Continue night operations / taxi at KCLL after AIM/AOM brief of this hazard by all squadrons.